# **REMARKS**

This is in response to the Office Action mailed on May 31, 2005, in which claims 1-29 were rejected. Claim 23 was rejected under 35 U.S.C. § 102(e) as being anticipated by Marsh (U.S. Patent Application 2002/0112395 A1). Claims 1, 5, 10, 12-17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Greuling (U.S. Patent Number 2,264,875) in view of Byom (U.S. Patent Number 5,253,448). Claims 6-7 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Greuling as modified by Byom and further in view of Marsh. Claims 8, 9, 18, and 20-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Greuling in view of Byom and further in view of Nelson (U.S. Patent Number 6,185,862). Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Greuling in view of Marsh and Nelson. Claims 25-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Marsh in view of Nelson. Claims 12-14 and 16-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Marsh.

The present invention is a device and method for removing a tick or other pest from a body surface of a human or animal host. The device is applied over the body surface and the pest so that it confirms to and adheres to both. When the pest has been smothered and releases the body surface, the release tab is used to peel the device from the body surface, carrying the pest with it. None of the cited references teach or suggest such a device or method.

With the present Amendment, each of the independent claims has been amended to emphasize these unique aspects of the invention. As a result, each of the rejections have been overcome and should be withdrawn.

### Rejection under 35 U.S.C. § 102(e)

Claim 23 was rejected under 35 U.S.C. § 102(e) as being anticipated by Marsh. For a claim to be anticipated, each and every element as set forth in the claim must be found in a single prior art reference. (See M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987)).) Claim 23 includes means plus function elements. The application of a prior art reference to a means plus function limitation requires that the prior art element perform the identical function

specified in the claim. (See M.P.E.P. § 2182.) In addition, the prior art structure must be the same as or equivalent to the structure disclosed in the specification, which has been identified as corresponding to the claimed means plus function. (See id.)

Claim 23 has been amended to require "means for securing the pest to the first side of the substrate by adhering the substrate to the body surface so that the substrate covers and conforms to the body surface and the pest" Marsh does not teach or suggest this element. Marsh teaches a device that is used like a tweezers to grasp and pull the tick.

Claim 23 also has been amended such that the pest removal device comprises "means for causing the pest to release itself from the surface." The Examiner states that Marsh shows "means such as the antiseptic or antibacterial substance for causing the pest to release from the surface." (Office Action 5/31/05 at pp.2-3, ¶2.) However, Marsh does not teach that the antiseptic or antibacterial substance is what causes the tick to be removed from the surface. Marsh teaches that the antiseptic or antibacterial substance can be used to "decrease the risk of infection at the site of the insect attachment." (Marsh at p. 2, ¶16.) In Marsh, the final step to remove the tick is "grasping and pulling the tick away from the point of attachment." (Id. at p. 1, ¶14 (emphasis added).) Marsh does not teach the function of causing the tick to release itself from the surface. Marsh also does not disclose an identical or equivalent structure, compared to the structure disclosed in this invention, for causing the tick to release itself from the surface. As such, claim 23 is not anticipated by Marsh.

# Rejections under 35 U.S.C. § 103(a)

Claims 1, 5, 10, 12-17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Greuling in view of Byom. To establish a *prima facie* case of obviousness under 35 U.S.C. § 103, three basic criteria must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teaches; (2) there must be a reasonable expectation of success; and (3) the prior art reference, or references when combined, must teach or suggest all the claim limitations. (See M.P.E.P. § 2143.)

# Claim 1:

As amended, claim 1 requires that "the main body is configured to conform to and attach to the surface to cover and smother the pest." The "surface" is a body surface of an animal or human, as defined in the amended preamble to claim 1. The Examiner states that, in Greuling, "the main body is configured to be applied to the surface to cover and smother the pest." (Office Action 5/31/05 at p. 3, ¶ 4.) However, Greuling does not teach using the main body to cover and smother the pest. Instead, Greuling discloses using the main body with the adhesive facing up such that the flies will land on the main body coated with adhesive. (See Greuling at p. 2, col. 1, ll. 10-15.) There is no suggestion to modify the Greuling device and apply the adhesive side of the main body, facing down, to a body surface of an animal or human. No one familiar with flypaper would consider using flypaper by applying it to the skin of an animal or human.

Moreover, claim 1 has been amended to add that the adhesive layer of the engagement side is "composed of a material that is not irritating to human skin or animal skin." (See Appl. at p. 8, ll. 6-8.) Greuling discloses the invention as including "wing members 7 and 8, these wing members collectively providing the shelf-like surface upon which the *fly-catching adhesive* is spread." (Id. at p. 1, col. 2, ll. 36-37 (emphasis added).) The fly-catching adhesive disclosed in Greuling does not teach or suggest this limitation since the type of adhesive used on fly-catching paper is not skin-friendly. Similarly, Byom discloses using paper coated with adhesive for catching flies. Like in Grueling, the adhesive disclosed in Byom would be irritating to human skin and animal skin. Because Greuling and Byom fail to teach or suggest all the claim limitations of claim 1, there is no *prima facie* case of obviousness for claim 1. Claims 5 and 10:

Claims 5 and 10 depend from independent claim 1 and contain all the limitations of claim 1. Since claim 1 is allowable, claims 5 and 10 are also allowable.

### Claim 12:

Claim 12 has been amended to add that the adhesive layer is hypoallergenic. (See Appl. at p. 8, ll. 6-8.) Neither Greuling nor Byom teaches or suggests this claim limitation that the adhesive layer be hypoallergenic. The adhesive used on fly-catching paper can be irritating to human skin or animal skin

and difficult to get off the skin, which is why contact with the adhesive on fly-catching paper is avoided. Conversely, in this invention, the adhesive is skin-friendly and the pest removal device can be left on the skin for a significant period of time without irritation to the skin. Since Grueling and Byom do not teach or suggest all the limitations of amended claim 12, there is no *prima facie* case of obviousness for claim 12. Claims 13-17:

Claims 13-17 depend from independent claim 12 and contain all the limitations of claim 12. Since claim 12 is allowable, claims 13-17 are also allowable.

### Claim 19:

Claim 19 has been amended to emphasize the application of the device to a body surface and to add that the adhesive layer includes a hypoallergenic material. (See Appl. at p. 8, ll. 6-8.) As explained above under claim 12, neither Greuling nor Byom teach or suggest this claim limitation. As such, there is no *prima facie* case of obviousness for claim 19.

Claims 6-7 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Greuling as modified by Byom and further in view of Marsh. Claim 11 has been canceled. Claims 6 and 7 depend from independent claim 1 and contain all the limitations of claim 1. Since claim 1 is allowable, claims 6 and 7 are also allowable.

Claims 8-9, 18, and 20-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Grueling in view of Byom and further in view of Nelson.

#### Claims 8-9:

Claims 8 and 9 depend from independent claim 1 and contain all the limitations of claim 1. Since claim 1 is allowable, claims 8 and 9 are also allowable.

#### Claim 18:

Claim 18 depends from independent claim 12 and contains all the limitations of claim 12. Since claim 12 is allowable, claim 18 is also allowable.

# Claims 20-22:

Claims 20-22 depend from independent claim 19 and contain all the limitations of claim 19. Since claim 19 is allowable, claims 20-22 are also allowable.

Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Greuling in view of Byom and further in view of Marsh and Nelson. Claim 24 has been amended to add that "the adhesive layer is skin-friendly such that the pest removal device can be left on a body surface for a significant period of time without irritating the body surface." (See Appl. p. 8, ll. 6-8 and p. 9, ll. 9-12.) Claim 24 has also been amended such that the pest removal device comprises "a material incorporated into the adhesive layer to cause the pest to release itself from the surface."

The Examiner is using Marsh to show that it would have been obvious, using the Greuling device as modified by Byom, to incorporate a material into the adhesive to cause the pest to release from the surface. (See Office Action 5/31/05 at p. 5,¶6.) As argued under claim 23 above, Marsh does not teach that the antiseptic or antibacterial substance is what causes the tick to be removed from the surface. Marsh teaches that the antiseptic or antibacterial substance can be used to "decrease the risk of infection at the site of the insect attachment." (Marsh at p. 2,¶16.) In Marsh, the final step to remove the tick is "grasping and pulling the tick away from the point of attachment." (Id. at p. 1,¶14 (emphasis added).) Marsh does not teach that the device causes the pest to release itself from the surface. Because this claim limitation is not taught by Marsh alone or in combination with the other references, a prima facie case of obviousness has not been established for claim 24.

In addition, claim 24 requires that the adhesive layer is "skin-friendly such that the pest removal device can be left on the surface for a significant period of time without irritating the surface." None of the references cited by the Examiner (Greuling, Byom, Nelson and Marsh), alone or in combination, teach or suggest that the adhesive disclosed in those inventions is skin-friendly and can be left on the surface for a significant period of time without causing irritation to the surface. As argued under claim 1, Greuling and Byom disclose an adhesive used for catching flies and this type of adhesive would not be skin-friendly.

Nelson teaches "to avoid a strong bond between the surface and the adhesive." (Nelson at col. 4, 1. 1.) Nelson further discloses "[t]he presence of the trapped insect between the substrate and the surface further serves to minimize the contact between the adhesive and the surface and accordingly the bonding between the adhesive and the surface is diminished." (Id. at col. 4, 1l. 2-5.) Therefore, Nelson, like Greuling and Byom, does not teach or suggest a skin-friendly device.

Marsh discloses that "[i]t is also desirable to impregnate the adhesive surface with a suitable antiseptic or antibacterial substance to decrease the risk of infection at the site of the insect attachment." (Marsh at p. 2, ¶ 16.) However, Marsh does not teach that the pest removal device could be left on the surface for a significant period of time. In fact, in Marsh, the device has minimal contact with the surface because the pest is being grasped and pulled away from the surface. (See Marsh at p. 1, ¶ 14.) Because Marsh and the other references, as described above, do not teach or suggest all the claim limitations of claim 24, there is no *prima facie* case of obviousness for claim 24.

Claims 25-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Marsh in view of Nelson.

#### Claim 25:

Claim 25 has been amended such that the method of removing a pest from a surface comprises "providing a pest removal device, wherein the pest removal device comprises an engagement side covered with a <u>skin-friendly</u> adhesive layer". Claim 25 has also been amended as follows: "securing the pest removal device to the pest and the surface for a time sufficient to cause the pest to release <u>itself</u> from the surface."

The Examiner states that "it would have been obvious to provide Marsh with the step of attaching the pest removal device to the pest and the surface as shown by Nelson for a time sufficient to cause the pest to release from the surface." (Office Action 5/31/05 at p. 6, \$8.) Neither Marsh nor Nelson alone, or when combined, teach this step of the method that the disclosed device causes the pest to release *itself* from the surface.

As mentioned above, Marsh removes the pest from a surface by "grasping and pulling the tick away from the point of attachment." (Marsh at p. 1, ¶ 14.) This is significantly different than the pest releasing itself from the surface. In Nelson, "[t]he use of the device involves application of the adhesive to an insect crawling along surface. The portion of the substrate provided with adhesive is pressed against the insect.... When the substrate is then removed from the surface the insect will adhere to the adhesive substrate." (Nelson at col. 6, ll. 1-9.) Nelson would not successfully remove an *embedded* pest because removing the substrate before the pest has released itself would cause parts of the pest to break off, leaving parts remaining at the burrow cite. (See Appl. at p. 2, ll. 9-23.) Nelson does not teach or suggest a method for causing the pest to release itself prior to the device being removed from the surface.

Combining the Marsh device with the Nelson device would not be successful at causing the pest to release itself from the surface since Nelson alone does not disclose how the device could accomplish this. Furthermore, it is not clear how to combine Marsh and Nelson since Marsh operates more like tweezers by grasping and pulling the pest out, whereas Nelson uses a flat, adhesive surface for the insect to adhere to. Because the references do not teach a method for causing the pest to release itself from the surface, there is no *prima facie* case of obviousness for claim 25.

Morever, Nelson teaches having minimum contact between the surface and the adhesive. "The presence of the trapped insect between the substrate and the surface further serves to minimize the contact between the adhesive and the surface and accordingly the bonding between the adhesive and the surface is diminished." (Nelson, col. 4, ll. 2-5.) As amended, claim 25 requires "a skin-friendly adhesive layer." Nelson teaches that the adhesive should only make contact with the insect and not the surface; thus Nelson teaches away from a skin-friendly adhesive. This provides further support that claim 25 is not obvious.

Finally, none of the references teach pulling a single release tab to peel the pest removal device from the body surface with the pest attached, as required by claim 25.

# Claims 26-29:

Claims 26-29 depend from independent claim 25 and contain all the limitations of claim 25. Since claim 25 is allowable, claims 26-29 are also allowable.

Claims 12-14 and 16-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Marsh.

#### Claim 12:

As amended, claim 12 requires that the main body is formed of a flexible, resilient foam material, has an engagement surface covered with a hypoallergenic pressure-sensitive adhesive, and is substantially flat and the engagement side is attachable to the surface (of an animal or human body) by the adhesive layer and is conformable to the surface to cover and smother the pest." The Examiner states that, in Marsh "the main body is substantially flat and shows the structure capable of being attachable to the surface by the adhesive layer to cover and smother the pest." (Office Action 5/31/05 at p. 7, ¶9.) First, the Marsh device is not substantially flat and conformable to the body surface when it is in use to remove the pest. Second, Marsh does not teach that the device smothers the pest, as required by claim 12. Rather, in Marsh, the pest is grasped and pulled away from the point of attachment. (See Marsh, at p. 1, ¶14.) Thus, Marsh teaches away from smothering the pest. Since this claim limitation is not taught by Marsh, there is no *prima facie* case of obviousness for claim 12.

Claim 12 also requires that "the release tab is graspable to apply a pulling force to the outer edge of the main body and peel the main body off the surface to which the main body is attached." The Examiner states that "Marsh shows the release tab is graspable to apply a pulling force as shown in Fig. 4 to the center and hence to the outer edge of the main body to peel the main body off the surface." (Office Action 5/31/05 at p. 7,¶9.) The Marsh device is not *peeled off* the body surface of an animal or human. In fact, it is unclear whether the Marsh device even contacts the body surface. The Marsh device contacts the pest and has minimal contact with the surface. The device is not peeled off the surface as required by claim 12. As this claim limitation is also not taught by Marsh, this further shows a failure to establish a *prima facie* case of obviousness for claim 12.

#### Claims 13-14 and 16-17:

Claims 13-14 and 16-17 depend from independent claim 12 and contain all the limitations of claim 12. Since claim 12 is allowable, claims 13-14 and 16-17 are also allowable.